

In the Claims:

Please **cancel** claims 1-39, 44, and 46-48.

Please **replace** claims 40 and 45 with the following **amended** claims that have the corresponding number.

AS
SUB B17
40. (Amended) A computer program product for mapping a plurality of cells after applying a manipulation to said plurality of cells, based upon a statistical analysis of a morphological value, said computer program product comprising:

code for capturing the morphological value from said plurality of manipulated cells;

code for assigning a degree of presence of said morphological value;

code for storing said degree of presence;

code for producing a statistical profile of said manipulated cells from said degree of presence; and

code for mapping said plurality of manipulated cells based upon said statistical profile,

wherein

said morphological value is derived from a first component of a cell and a second component of said cell and wherein said morphological value is one or any combination of a cell count, an area, a perimeter, a length, a breadth, a fiber length, a fiber breadth, a shape factor, an elliptical form factor, an inner radius, an outer radius, a mean radius, an equivalent radius, an equivalent sphere volume, an equivalent prolate volume, an equivalent oblate volume, an equivalent sphere surface area, an average gray value, a total gray value, or an optical density; and

a computer readable storage medium for holding the codes.

AB SUB D1
45. (Amended) The computer program product of claim 40 wherein said degree of presence is a multiple of a quantized value.

Please **add** the following claims:

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